Before the
Federal Communication Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 97 of the Commission's Rules	)	WT Docket No. 04-140
Governing the Amateur Radio Services	)	RM-10355
	)	

Comments of the Jet Propulsion Laboratory Amateur Radio Club

Introduction

1. The Jet Propulsion Laboratory Amateur Radio Club (JPLARC) has approximately 100 members who are employees of or retirees from the Jet Propulsion Laboratory (JPL), a federally-funded research and development center (FFRDC) operated under contract by the California Institute of Technology (Caltech) for the National Aeronautics and Space Administration (NASA). The voting members of the JPLARC, through their Board of Directors and President, submit the following comments in support of the proposed amendment of 47 CFR 97.113(e) regarding communications, including incidental music, originating on United States Government frequencies between a manned spacecraft and its associated Earth stations.

Comments

2. The JPLARC has retransmitted Space Shuttle audio communications on amateur radio service VHF allocations during every mission, beginning with STS-1 under Special Temporary Authority granted by the Commission, and later under the rules codified in 47 CFR 97.113(e). These retransmissions have been of great interest to amateur radio operators and educators in the Los Angeles Metropolitan Area and adjacent regions of Southern California. Members of the JPLARC are intimately familiar with both Space Shuttle and International Space Station (ISS) audio communications. The latter is available presently by two means: (1) a terrestrial leased circuit originating at the Johnson Space Center (JSC) and sent to the various NASA field centers called *Mission Audio*, and (2) a one-hour, live, commented feed transmitted daily over the publicly available C-band *NASA Television* channel. The audio communications consists of English from JSC and Russian (with simultaneous English technical translation) from the Mission Control Center in Korolev outside Moscow.

3. The Commission asks in Paragraph 38 whether any distinctions exist that should result in disparate treatment between retransmissions from the Space Shuttle and the ISS. Our long-term observations indicate that ISS audio communications are less frequent and generally of shorter duration than those conducted with the Space Shuttle and are completely harmonious with the spirit and intent of the Commission when it adopted the current wording of 47 CFR 97.113(e). Furthermore, the existing restrictions in 47 CFR 97.113(e) that "...manned spacecraft communications retransmissions may not be conducted on a regular basis, but only occasionally, as an incident of normal amateur radio communications" provides protection against misuse of the Amateur Service allocations.

4. Adopting the broad and flexible wording of the proposed rulemaking is entirly in keeping with The Vision for Space Exploration[1] as mankind advances into the cosmos, starting with our presence on ISS, then to the moon, Mars, and beyond. The broad and flexible wording of the proposed rulemaking accommodates circumstances that could not have been reasonably foreseen by the Commission when it adopted wording specifically referencing the Space Shuttle. In this regard, the use of the proposed text, "...manned spacecraft..." provides for the evolution of our spacefaring systems.

5. The JPLARC would furthermore point out that with increasing use of the amateur radio station aboard the International Space Station, ISS audio communications become a vital source of up-to-date information relating to current or upcoming amateur radio operating activity by the crew. Access to this information by the general amateur radio community through the retransmission of the *Mission Audio* circuit on amateur radio service frequencies will surely be welcome. In particular, the use of these re-transmissions by educators who are licensed amateur radio operators to reach school children supports the goals expressed in The Vision for Space Exploration: "Youth are especially drawn to Mars rovers, astronauts, and telescopes. If engaged effectively and creatively, space inspires children to seek careers in math, science, and engineering, careers that are critical to our future national economic competitiveness."[2] These retransmissions truly do "…inspire the next generation of space explorers, as only NASA can."

Conclusion

6. For these reasons, the JPLARC urges the Commission to adopt the proposed rulemaking at the earliest possible date and to utilize its proposed wording, "...manned spacecraft..." so as to provide the greatest future flexibility.

Respectfully submitted this Fourteenth Day of June, 2004.

[1] *The Vision For Space Exploration*, NASA, Feburary 2002.
[2] Ibid., p.21

Prepared for the JPLARC by:
Jan A. Tarsala
Licensee of amateur radio station WB6VRN

Approved by:
James P. Lux, P. E.
President, JPLARC
Licensee of amateur radio station W6RMK
818.354.2075 (business)
818.393.6875 (FAX)
james.p.lux@jpl.nasa.gov